

**Minutes of Medical/Epidemiology Subcommittee Organization Meeting
8/31/05**

- **Meeting started @ 8:15**
- **Discussion of validation of new screening test**
 - **Establish valid baseline via a study group of new population**
 - **Pre-employment screening**
 - **Lobby for additional funds from EH1**
 - **Establish a panel of experts**
 - **Experts comprised of a small group of physicians who have published for peer review (10 – 12)**
 - **Define disciplines that need to be included in this panel or advise the panel.**
 - **Private industry (Boeing, Lockheed)**
 - **NNSA**
 - **Air Force**
 - **Define Adjunct advisors to the panel (Dr. Wood action item)**
 - **Purpose of Expert Panel**
 - **Panel starts with a list of questions after oversight of BHSC**
 - **Panel formulates a path forward with scheduled milestones**
 - **Review parallel testing**
 - **Develop priority list of flow cytometry tests**
 - **Review new tools for diagnostic testing**
 - **MRI**
 - **Urine screening**
 - **Other**
 - **Review ways of understanding the disease process**
 - **Diagnostic tests, tissue testing, etc**
 - **Establish a clear procedure for handling beryllium-contaminated wounds**
 - **Define how to evaluate the work place**
 - **What is the expectation?**
 - **Define what it means to find beryllium**
 - **What is a dangerous exposure?**
 - **Define beryllium-free areas**
 - **Establish tools for evaluating the work place**
 - **Arrive at strong documentation for workplace exposures Document current exposures**
 - **IH Testing**
 - **Medical Surveillance**
 - **Urine and/or blood testing of value?**
 - **National testing has not shown detectable values of beryllium**
 - **Should we test groups that include known exposed population?**
 - **80 – 94% exposed, never get CBD**
 - **Trending**

- **Medical surveillance requirements**
 - **Emergency Response Testing, post-event evaluation**
 - Subcommittee to address gap in this area
 - Currently in the UK, they aggressively clean and swab wounds for analysis and remove contaminated tissue. Follow up with employee is important for psychological well being.
 - What are the medical treatment options? ATS report?
- **Designate a Co-Chair for IH Issues**
- **Subcommittee to provide more details to full Committee of their needs, i.e. diagnostic tests, LPT, tissue testing, etc.**
- **Dr. Wood's Action Items**
 - Recommendation for size of workgroup
 - Procedure for invitation to fill the chairs in the workgroup
 - Set of questions to address for committee oversight
- **Funding requests**
 - Define what is needed as a beryllium community
 - Ask organizations how they can play a role (DOE, DOD, Health and Human Resources)
 - How do you get them interested in participating?
 - Develop a plan on how to proceed
 - Where does the money need to go?
 - Blend of medical surveillance and IH study
 - Life Cycle Cost Minimization
 - Real time monitoring
 - Clearly outline what is important, that we can all agree on and get support from both the legislative and executive side and encourage both sides to push for action
 - Once funded, there should be a single oversight body – NIOSH?

- **Research Needs**
 - **Airborne vs. skin contact risks**
 - **Can skin sensitization lead to CBD or only when associated with respiratory exposure?**
 - **Respiratory risk is more relevant to human risks**
 - **Minimum IH standard needs to be established by another subcommittee**
 - **Study documented exposures to develop consistent method for sampling skin**
 - **Characterize the types of exposures at different operations**
 - **Recommendation on how to do advance sampling**
 - **Recommendation on work population that would be useful to do a study of skin only exposure**
 - **How can we define a skin only study?**
 - **General population study**
 - **Determine incidence of false positives**
 - **Could CDC do BeLPT on their beryllium urine test group?**
 - **Validate improved tests (First priority)**
 - **Study of CBD cases and controls to come up number of factors that would indicate your likelihood of getting CBD**
 - **Treatment options**
 - **Support groups with good ideas in their efforts for funding**
 - **Limit further exposure**
- **Develop matrix of the issues by applying a ranking for importance and difficulty to determine which issues to tackle**

To be discussed tomorrow:

- **Mission Statement**
- **Determine officers needed**
- **Election of officers**
- **Establish other work groups needed**

Adjourned @ 4:20pm

**Minutes of Medical/Epidemiology Subcommittee Organization Meeting
9/01/05**

- **Meeting started @ 8:40am**
- **Mission Statement**
 - **Improve the state of good scientific application of medicine in support of people that are trying to carry out health and safety issues.**
 - **Validate new tests**
 - **Identify employee risks that is understandable to the employee**
 - **Help contractors manage corporate liability**
 - **Apply modern risk assessment tools**
 - **Promote or foster studies that will identify or provide us more understanding of the risk to disease in order to determine safe levels of exposure.**
 - **Inclusion of end user**
 - **Advocate funding to support improved treatment of CBD.**
 - **Provide forum for physicians who work with patients to improve their knowledge.**
- **Education (Issue for different subcommittee)?**
 - **Provide CBD prevention program for non-medical community that addresses risk assessment and operational issues.**
 - **Education of Engineers and operations personnel in order to improve the use of engineering controls.**
- **Beryllium Health-Related Research and Development Priority List (not Medical/Epidemiology Priority List)**
 - 1) **Develop and validate improved screening and diagnostic tests, including the identification of genetic factors that relate to risk**
 - **In looking for a better test, we would be looking at less invasive and more predictive tests**
 - 2) **Validate sampling method that characterizes fine particulate lung deposition via the development of a personal particle size-selective sampling method for beryllium, including the development of high volume personal pump**
 - **Validate sampling method that characterizes fine particulate lung deposition**
 - 3) **Select technologies, further develop, validate, and deploy real-time monitoring methods, including aerosol and particle reference materials**
 - 4) **Develop an animal model of human CBD**
 - 5) **Characterize and determine the health significance of the physico-chemical properties of the beryllium aerosols in the workplace as they relate to risk**
 - 6) **Develop a method for quantifying skin, mucous membrane exposure and their role in disease progression**
 - **Evaluate surfaces and from evaluation, know risk of exposure, toxicokinetic**

- 7) **Develop leading edge engineering and administrative controls for maintenance/construction activities and operations that control particulate exposure**
 - Minimize worker exposure risk; demonstrate technology efficiency or effectiveness; develop a case log of engineering controls and exposure data
- 8) **Develop an intermediate near real-time monitoring instrument/method/analytical method**
- 9) **Determine the prevalence of sensitization and disease in general population**
 - To identify forms of exposure (i.e., power plants, smoking, by standardized exposure?)
- 10) **Characterize operations and particle size distribution in terms of health risk**
- 11) **Determine the relationship between surface contamination and health risk**
- 12) **Develop standardized and validated sampling methods for general and porous surfaces, bulk samples, vacuuming, and other relevant media**
- 13) **Define natural history of disease process**
 - Determine differences in disease progression, determine time frame of disease progression from initial exposure?
- 14) **Explore opportunities for therapeutic interventions (pre-CBD) or specific therapies for CBD**
 - Prevent progression to disease
- 15) **Develop a coating technology to mitigate aerosol/particulate release**
 - To determine a technology that is compatible with certified parts
- 16) **Develop a nationwide beryllium registry for all sensitized and CBD individuals**
- 17) **Study mechanism showing progression of sensitization to disease and different rates of progression**
- 18) **Develop a nationwide tissue repository (library)**
 - To have a library available so that all researchers have access for various research projects
- 19) **Determine sample location as it relates to risk**
 - Can an area sample be related to personal samples for particle size limiting methods?
- 20) **Study risks of exposure to naturally occurring and other potential forms of beryllium**
- 21) **Explore technologies for detecting beryllium in tissue**
 - For use to develop a medical diagnostic technique
- 22) **Develop a method to determine the in-vivo fate of beryllium**
 - Moving material from point of body contact to target organ (i.e., skin surface to lung understanding toxicokinetics)
- 23) **Determine if there could be other factors that could cause a synergistic effect or initiation point**

- **Determine officers needed (offline discussion)**
- **Election of officers (offline discussion)**
- **Establish other work groups needed**
 - **Epidemiology and Risk Management**

Adjourn @ 10:40am

09/01

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✓
Not here
✓
✓
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✓
Not here
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